

**REMARKS/ARGUMENTS**

**Rejection of claims 1-10 and 14-18 under 35 U.S.C. §103(a)**

Claims 1-10 and 14-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Jones* (U.S. Patent 4,082,071) in view of *Poulson* (U.S. Patent 6,299,662) or *Brunner* (U.S. Patent 5,964,909), and further in view of DE 23 245 75. For the following reasons, Applicant respectfully requests reconsideration and withdrawal of the rejection.

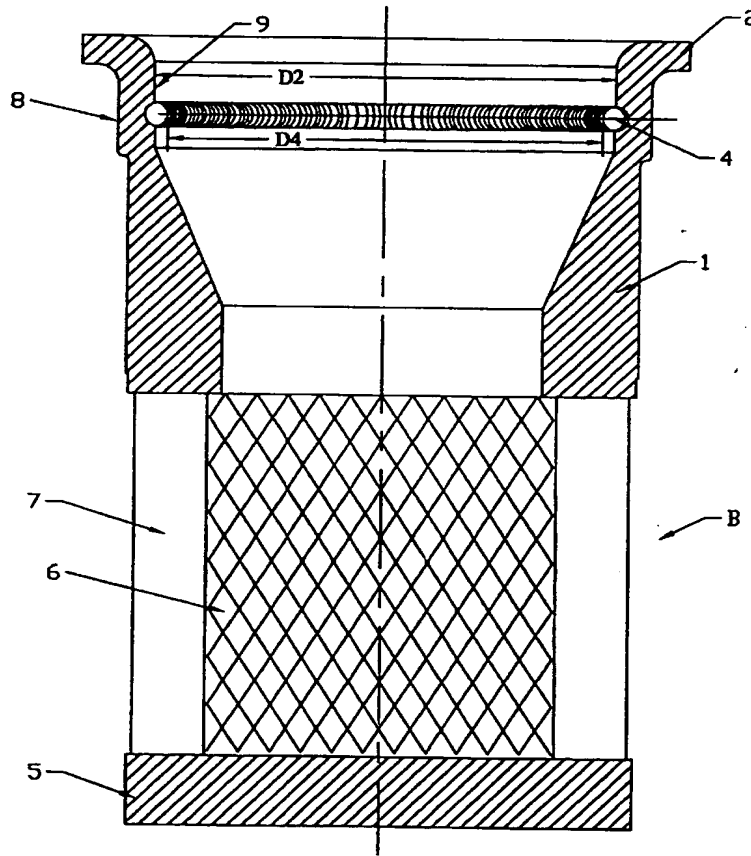
In the rejection, the Examiner stated that *Jones* does not teach a mount that forms a seal but either *Brunner* or *Poulsen* discloses such a mount. The Examiner further stated that it would have been obvious to provide the mount of *Brunner* or of *Poulsen* in the ventilator system of *Jones*.

Applicant respectfully traverses the rejection on the following two alternative grounds.

1. **Neither *Brunner* nor *Poulsen* teaches the mount of Applicant's invention**

The Examiner stated that *Brunner* discloses "a mount [that] is constructed as a nipple that is gas permeable in the area between the end disks of the separating cartridge" (page 3, lines 2-4, of the Office Action). In this regard, the Examiner considered the top boot (1) of *Brunner* as the amount of Applicant's

invention (see the Office Action at line 3 from the bottom of page 2 and line 3 of page 3). Applicant strongly disagrees with the Examiner's reading of *Brunner*.



**Figure 1 - US 5,964,909**

In the above-shown Figure 1 of *Brunner*, the filter cartridge of *Brunner* includes a bottom cap (5), inner core (6), pleated filter media (7), and top boot (1) (see *Brunner* at column 3, lines 2-4). The top boot (1) is shaped like a ring and is used to seal the top end of the filter media (7). Therefore, the top boot (1) is essentially an end disk. The bottom cap (5) is shaped like a plate and is used to seal the bottom end of the filter media (7).

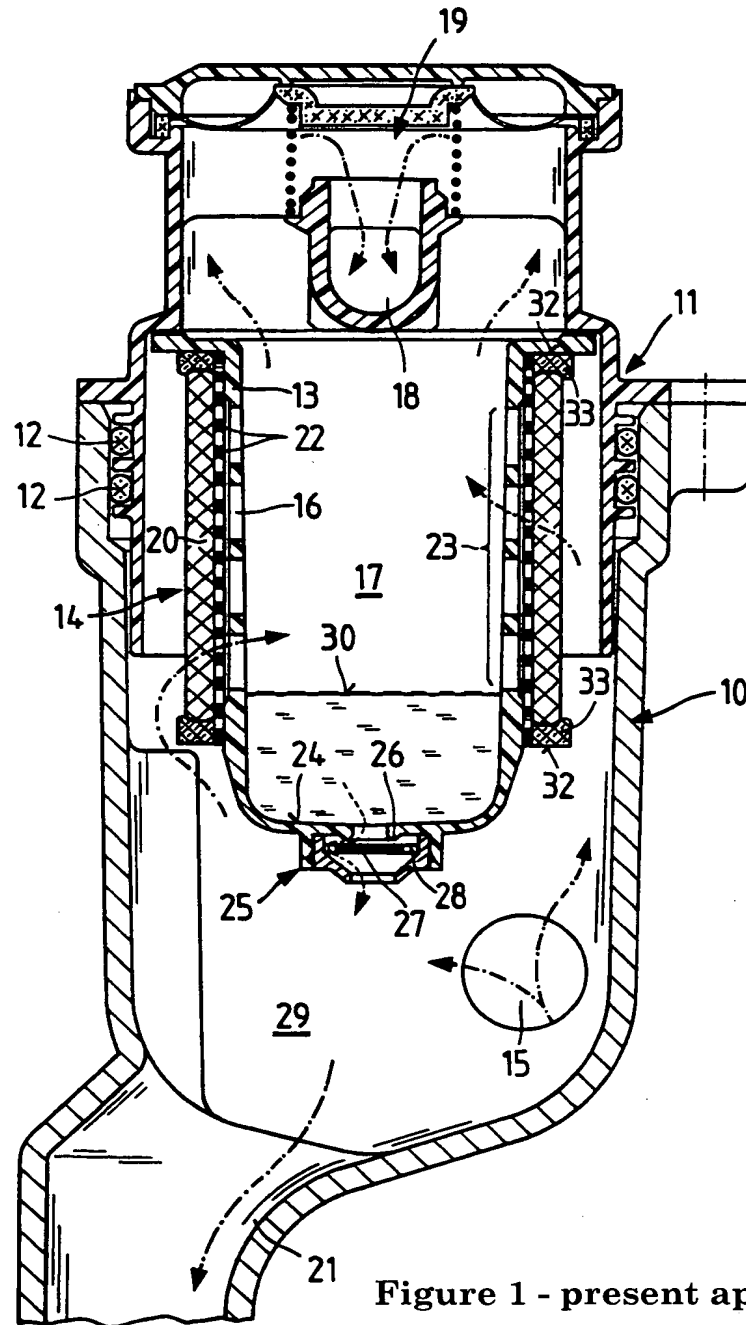


Figure 1 - present application

Applicant's invention uses a very different arrangement. In the embodiment illustrated in Figure 1 (shown above) of the present application, for example, a liquid separator include a filter media (20), an end disk (33) used to

seal one end of the filter media (20), and another end disk (33) used to seal the other end of the filter media (20). The liquid separator further includes a mount (13) that is shaped like a nipple, and the end disks (33) engage the mount (13) to form a seal. The mount (13) as shown above is highlighted with a yellow highlighter. The area (16) of the mount (13) between the end disks (33) is gas permeable.

The top boot (1) of *Brunner*, contrary to the Examiner's contention, is very different from the mount (13) of Applicant's invention. First, Applicant's mount (13) is shaped like a nipple, while the top boot (1) of *Brunner* is shaped like a ring. Second, Applicant uses the end disks (33) to seal the ends of the filter media (20), while *Brunner* uses the top boot (1) to seal the top end of the filter media (7). Therefore, the top boot (1) is essentially an end disk. Third, Applicant's mount (13) is used to engage with the end disks (33) of the filter cartridge to form a seal, while *Brunner's* top boot (1) is an end disk itself and does not engage with the bottom cap (5) at all. Fourth, the area (16) of the mount (13) between the end disks (33) is gas permeable, while this feature is totally absent from *Brunner's* top boot (1) because the top boot (1) is a solid ring and does not engage with two end disks.

In summary, *Brunner's* top boot (1) bears no resemblance to, and therefore does not teach, the mount of Applicant's invention.

The Examiner also stated that *Poulsen* discloses "a mount [that] is constructed as a nipple that is gas permeable in the area between the end disks of the separating cartridge" (page 3, lines 2-4, of the Office Action). In this regard, the Examiner considered the collar (4) of *Poulsen* as the amount of Applicant's invention (see the Office Action at line 3 from the bottom of page 2 and line 3 of page 3). Applicant strongly disagrees with the Examiner's reading of *Poulsen*.

In Figure 1 of *Poulsen*, the filter cartridge (1) of *Poulsen* includes a bottom (21), filter (3), and sleeve (22) (see *Poulsen* at column 3, lines 11-13). The collar (4), shown in Figure 3, is used to take the place of the sleeve (22) and to seal the top end of the filter (3). Therefore, the collar (4) is essentially an end disk. The bottom (21) is shaped like a plate and is used to seal the bottom end of the filter (21).

The collar (4) of *Poulsen*, contrary to the Examiner's contention, is very different from the mount (13) of Applicant's invention. In fact, the collar (4) of *Poulsen* is almost the same as the top boot of *Brunner*. Therefore, the collar (4) of *Poulsen* does not teach a mount (1) that is shaped like a nipple, (2) that engages the end disks to form a seal, and (3) in which the area between the end disks is gas permeable.

**In conclusion, Applicant would like to strongly emphasize that the top boot (1) of *Brunner* and the collar (4) of *Poulsen* are merely a part**

that is placed at the top end of the filter media, and do not engage the end cap at the bottom of the filter media. The mount of Applicant invention, on the other hand, is a part that extends from the top of the filter media to the bottom of the filter media, and engages with an end disk at the top of the filter media and with another end disk at the bottom of the filter media.

2. Lack of motivation or suggestion to combine the teachings of the cited references

The MPEP requires that in order to establish a prima facie case of obviousness, there must be some suggestion or motivation, either in the cited references or in the knowledge generally available to one of ordinary skill in the art, to combine reference teachings (see MPEP §2143).

Applicant respectfully submits that the Examiner has failed to point out where in prior art or in general knowledge exists the motivation or suggestion to combine the teachings of the cited references. Accordingly, the obviousness rejection is improper.

Rejection of claims 11-13 under 35 U.S.C. §103(a)

Claims 11-13 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Jones* in view of *Poulson* or *Brunner*, further in view of DE 23 245 75, and still further in view of Gewiss (U.S. Patent 5,413,712). The validity of this rejection is based on the validity of the previous obviousness rejection. Because

Application No. 09/988,825  
Reply dated October 22, 2003  
Response to Office Action dated July 22, 2003

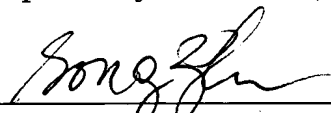
the previous rejection is improper, as stated above, this rejection is also improper.

In light of the foregoing remarks, this application is considered to be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (CAM #: 037141.50615US).

October 22, 2003

Respectfully submitted,



Song Zhu, Ph.D.

Reg. No. 44,420

J. D. Evans

Registration No. 26,269

CROWELL & MORING, LLP  
Intellectual Property Group  
P.O. Box 14300  
Washington, DC 20044-4300  
Telephone No.: (202) 624-2500  
Facsimile No.: (202) 628-8844  
JDE:SZ:tlm (037141.50615US)